

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Behler et al.  
Filing Date : December 20, 2001  
Title : NONIONIC SURFACTANTS  
  
Grp./A.U. : Unknown  
Examiner : Unknown  
  
Docket No. : C2384 US

Application Branch  
Assistant Commissioner for Patents  
Washington, DC 20231

**PRELIMINARY AMENDMENT**

Sir:

Preliminary to examination, please amend the instant application as follows.

**In the Specification:**

At page 1, line 1, please delete "**Field of the Invention**" and replace with

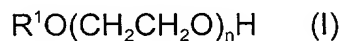
**--Background of the Invention--.**

At page 1, line 8, delete "Prior Art".

At page 23, please delete the current Abstract and replace with a new Abstract of the Disclosure, submitted herewith:

-- Abstract of the Disclosure

A detergent composition containing a surfactant mixture, the surfactant mixture containing: (a) a nonionic surfactant corresponding to formula (I):



wherein R<sup>1</sup> is a hydrocarbon radical having from about 16 to 18 carbon atoms and n is a number from about 5 to 10, and wherein the nonionic surfactant has an iodine value of from about 20 to 50; and (b) a co-surfactant selected from the group consisting of an alkyl oligoglycoside, an alkenyl oligoglycoside, an alkyl ether sulfate, and mixtures thereof. --

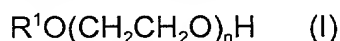
In the Claims:

Cancel claims 1-10, without prejudice.

Please enter the following new claims.

11. (New) A detergent composition comprising a surfactant mixture, the surfactant mixture containing:

(a) a nonionic surfactant corresponding to formula (I):



wherein  $R^1$  is a hydrocarbon radical having from about 16 to 18 carbon atoms and  $n$  is a number from about 5 to 10, and wherein the nonionic surfactant has an iodine value of from about 20 to 50; and

(b) a co-surfactant selected from the group consisting of an alkyl oligoglycoside, an alkenyl oligoglycoside, an alkyl ether sulfate, and mixtures thereof.

12. (New) The composition of claim 11 wherein the nonionic surfactant has the following carbon chain length distribution:

- (a) from about 55 to 65% by weight of  $C_{16}$  saturated;
- (b) from about 2 to 10% by weight of  $C_{18}$  saturated;
- (c) from about 25 to 30% by weight of  $C_{18}$  mono-unsaturated; and
- (d) from about 1 to 5% by weight of di-unsaturated,

with the proviso that the amounts, together with small amounts of shorter-chain and/or longer-chain homologues, add up to 100% by weight.

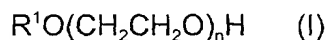
13. (New) The composition of claim 11 wherein the nonionic surfactant has the following carbon chain length distribution:

- (a) about 60% by weight of  $C_{16}$  saturated;
- (b) about 5% by weight of  $C_{18}$  saturated;
- (c) about 28% by weight of  $C_{18}$  mono-unsaturated; and
- (d) about 3% by weight of di-unsaturated,

with the proviso that the amounts, together with small amounts of shorter-chain and/or longer-chain homologues, add up to 100% by weight.

14. (New) The composition of claim 11 wherein the nonionic surfactant is derived from a palm stearin raw material.
15. (New) The composition of claim 11 wherein in formula (I), n is 8.
16. (New) The composition of claim 11 wherein the nonionic surfactant has an iodine value of from about 30 to 40.
17. (New) The composition of claim 11 wherein the nonionic surfactant and co-surfactant are present in the composition in a ratio by weight of from about 60:40 to 40:60.
18. (New) The composition of claim 11 wherein the surfactant mixture is present in the composition in an amount of from about 1 to 50% by weight, based on the weight of the composition.
19. (New) The composition of claim 11 wherein the surfactant mixture is present in the composition in an amount of from about 5 to 40% by weight, based on the weight of the composition.
20. (New) The composition of claim 11 wherein the composition contains up to about 5% by weight, based on the weight of the composition, of water.
21. (New) A process for enhancing cold water solubility of a laundry detergent comprising adding an effective amount of a surfactant mixture to the laundry detergent, the surfactant mixture containing:

(a) a nonionic surfactant corresponding to formula (I):



wherein  $R^1$  is a hydrocarbon radical having from about 16 to 18 carbon atoms and n is a number from about 5 to 10, and wherein the nonionic surfactant has an iodine value of from about 20 to 50; and

(b) a co-surfactant selected from the group consisting of an alkyl oligoglycoside, an alkenyl oligoglycoside, an alkyl ether sulfate, and mixtures thereof.

22. (New) The process of claim 21 wherein the nonionic surfactant has the following carbon chain length distribution:

- (a) from about 55 to 65% by weight of C<sub>16</sub> saturated;
- (b) from about 2 to 10% by weight of C<sub>18</sub> saturated;
- (c) from about 25 to 30% by weight of C<sub>18</sub> mono-unsaturated; and
- (d) from about 1 to 5% by weight of di-unsaturated,

with the proviso that the amounts, together with small amounts of shorter-chain and/or longer-chain homologues, add up to 100% by weight.

23. (New) The process of claim 21 wherein the nonionic surfactant has the following carbon chain length distribution:

- (a) about 60% by weight of C<sub>16</sub> saturated;
- (b) about 5% by weight of C<sub>18</sub> saturated;
- (c) about 28% by weight of C<sub>18</sub> mono-unsaturated; and
- (d) about 3% by weight of di-unsaturated,

with the proviso that the amounts, together with small amounts of shorter-chain and/or longer-chain homologues, add up to 100% by weight.

24. (New) The process of claim 21 wherein the nonionic surfactant is derived from a palm stearin raw material.

25. (New) The process of claim 21 wherein in formula (I), n is 8.

26. (New) The composition of claim 21 wherein the nonionic surfactant has an iodine value of from about 30 to 40.

27. (New) The process of claim 21 wherein the nonionic surfactant and co-surfactant are present in the composition in a ratio by weight of from about 60:40 to 40:60.

28. (New) The process of claim 21 wherein the surfactant mixture is added to the composition in an amount of from about 1 to 50% by weight, based on the weight of the composition.

29. (New) The process of claim 21 wherein the surfactant mixture is added to the composition in an amount of from about 5 to 40% by weight, based on the weight of the composition.

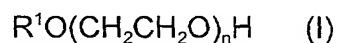
30. (New) The process of claim 21 wherein the composition contains up to about 5%

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by weight, based on the weight of the composition, of water.

31. (New) A process for cleaning textiles comprising contacting the textiles with a laundry detergent composition containing a surfactant mixture, the surfactant mixture comprising:

(a) a nonionic surfactant corresponding to formula (I):



wherein  $R^1$  is a hydrocarbon radical having from about 16 to 18 carbon atoms and  $n$  is a number from about 5 to 10, and wherein the nonionic surfactant has an iodine value of from about 20 to 50; and

(b) a co-surfactant selected from the group consisting of an alkyl oligoglycoside, an alkenyl oligoglycoside, an alkyl ether sulfate, and mixtures thereof.

REMARKS/ARGUMENTS

Claims 11-31 are currently pending in the instant application.

The Specification has been amended to include the preferred section headings pursuant to 37 C.F.R. §1.77. All of the amendments to the Specification constitute deletions of original section headings and/or paragraphs, and insertions or additions of new section headings and/or paragraphs. It is submitted that the amendments to the Specification made herein introduce no new matter. Their entry is therefore proper and respectfully requested. Accordingly, pursuant to 37 C.F.R. §1.121(b)(1)(iii), no separate page captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE" is necessary.

Original claims 1-10 have been canceled and replaced with new claims 11-31 solely for the purpose of improving clarity and grammar, which may suffer in translation, and not for any reason which relates to the statutory requirements for a patent. New claims 11-31 have not been added in response to any rejection, nor in anticipation of any rejection. Applicant(s) respectfully submit(s) that the scope of new claims 11-31 corresponds to the scope of original claims 1-10, and that new claims 11-31 are no narrower than original claims 1-10. Furthermore, although a moot point in view of their cancellation, Applicant(s) respectfully submit(s) that original claims 1-10 satisfied the requirements of 35 U.S.C. §112, as filed. New claims 11-31 are supported by the claims as originally filed and by the Examples. No new matter has been introduced. Entry is therefore believed by Applicant to be proper and respectfully requested.

Prompt examination of the instant application in view of the

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amendments made herein is respectfully requested.

Respectfully submitted,



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